

ABSTRACT OF THE DISCLOSURE

5 A compact air pump and valve package includes pump and valve assemblies integral with a pressure housing defining inlet ports and a plurality of fittings for connecting air lines to an interior of the pressure housing. The linear diaphragm pump assembly has a permanent magnetic shuttle mounting two diaphragms reciprocated by an electromagnet. The valve assembly has a plurality of solenoid valves disposed within the pressure housing, each solenoid valve being operable to control flow into or out of the pressure housing through an associated one of the plurality of fittings. Thus, no tubes or hoses are
10 required to transfer air from the pump assembly to the valves. The housing has special mounts to isolate vibration arising from movement of the shuttle.